

Fiscal Services Division

Legislative Services Agency

Fiscal Note

HF 2754 - Renewable Fuel Incentive (LSB 5701 HZ)

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Fiscal Note Version - New

Description

House File 2754 creates three income tax credits related to renewable fuels, sunsets an existing ethanol income tax credit, and provides for a renewable fuel infrastructure grant program. The Bill also establishes renewable fuel percentage thresholds and provides for a contingent gas tax schedule in instances where the threshold is not achieved.

House File 2754 has the following direct fiscal impacts on State revenue and expenditures.

State Income Tax Revenue:

1. An income tax credit of five cents per gallon for each retail gallon of ethanol sold in the State from January 1, 2006, through December 31, 2025. From 2006 through 2010, the credit is available for each gallon. From 2011 through 2025, the credit is available for an amount less than the full gallons sold. For this credit, the term "ethanol" refers to the gallons of pure ethanol sold as components of any blend of gasoline.
2. An income tax credit for each gallon of E85 (a combination of petroleum gasoline and ethanol, where the ethanol percentage is between 70.0% and 85.0% of the combined product). The credit is equal to twenty-five cents per gallon beginning calendar year 2006, and declines to zero by calendar year 2020.
3. An income tax credit of three cents per gallon for retail biodiesel fuel sold in the State from January 1, 2006, through December 31, 2012. To qualify for the credit, a retailer's diesel sales for the tax year must be at least 50.0% biodiesel. If the 50.0% threshold is achieved, the retailer earns a tax credit of three cents per gallon for all gallons of biodiesel sold that tax year.
4. Sunsets the current 2.5 cents per gallon income tax credit for ethanol gallons sold in excess of 60.0% through an individual retail location.

State Gasoline Tax Revenue – The intent of the ethanol tax and infrastructure incentives in HF 2754 and HF 2759 (Renewable Fuels Infrastructure Bill) is to increase the gallons of ethanol consumed in gasoline. If E10 and E85 fuels deliver lower gas mileage than unblended gasoline, moving to a larger percentage of those fuels will increase the total number of gasoline gallons consumed. Since the gas tax is collected on a per-gallon basis, increasing the number of gallons will increase the yield of the gas tax, as long as the per-gallon tax rate is the same for E85, E10, and unblended gasoline.

Appropriations for Petroleum Infrastructure – House File 2754 creates a Renewable Fuels Infrastructure Fund to provide financial assistance to persons installing E85 and biodiesel dispensing equipment. House File 2759 (Renewable Fuels Infrastructure Appropriation Bill) appropriates \$2.0 million per year from the Iowa Values Fund for FY 2006, FY 2007, and FY 2008 to the Renewable Fuels Infrastructure Fund. Sixty-five percent of the appropriation is to be made available for E85 installations and thirty-five percent for biodiesel installations. House File 2759 also allows up to \$50,000 of the appropriation to be used each year by the Department of Natural Resources for administration.

For retail locations, the assistance shall be in the form of a grant equal to not more than 30.0% of the installation cost or \$30,000, whichever is lower. For biodiesel terminal facilities, the assistance is in the form of a cost share grant that shall not exceed the cost of the improvements.

Administrative Costs – The Bill will create additional duties for the Department of Natural Resources, Department of Agriculture and Land Stewardship, and the Department of Revenue. The majority of the administrative costs listed in Table 2 represent start up and personnel costs identified by the Department of Agriculture and Land Stewardship.

Assumptions

Gasoline Related –

1. Under current law, gasoline sales will increase 1.0% per year through calendar year (CY) 2025.
2. Over the course of a year, E85 will average 79.0% ethanol content.
3. The per-gallon gas tax, including the 1.0-cent Underground Storage Tank Diminution Fee, is 21.0 cents per gallon, starting July 1, 2007. The diminution fee expires June 30, 2016. The tax rates are different for each product prior to July 1, 2007, but the difference does not impact the fiscal estimates.
4. The supply of vehicles able to operate on E85 gasoline (flex-fuel vehicles) will meet or exceed the available E85 fuel supply.
5. The average gas mileage achieved with E10 is 2.35% lower than unblended gasoline and the gas mileage achieved with E85 is 20.0% lower (a vehicle achieving 25.0 mpg on unblended will achieve 24.41 mpg on E10 and 20.00 mpg on E85).
6. The infrastructure and per-gallon tax incentives for ethanol sales will create sufficient retail incentive and consumer demand for E10 and E85 and the statewide total ethanol gallon percents will just equal the thresholds (key determination periods) as specified in the Bill.
7. Tax credits from sales for a calendar year are assumed to be redeemed in the next fiscal year (CY 2006 credits are redeemed FY 2007).
8. The projected taxable gallons sold in Iowa under current law as well as the projected gallons sold under these assumptions are provided in **Appendix A** at the end of this document.

Diesel Related –

1. Taxable diesel sales in CY 2005 totaled 648.4 million gallons.
2. Assume an additional 18.0% (116.7 million gallons) for non-taxable retail sales.
3. Diesel sales will increase at an average annual rate of 3.75%.
4. The miles per gallon achieved with diesel and B02 biodiesel are similar.
5. The infrastructure incentives in the Bill will be utilized and several terminals will be upgraded over the three years.
6. Significant investment in retail facility upgrades is not necessary for biodiesel.
7. At all price levels of biodiesel and diesel, the 3.0 cent per-gallon tax credit will produce B02 biodiesel prices lower than the comparable pure diesel price.
8. Tax credits from sales for a calendar year are assumed to be redeemed in the next fiscal year (CY 2006 credits are redeemed FY 2007).

9. The projected taxable gallons sold are provided in **Appendix B** at the end of this document.

Fiscal Impact

The creation of three new renewable fuel income tax credits, along with the sunset of the current ethanol credit, is projected to reduce retailer's net income tax liability each year through FY 2018. The projections, by tax credit and by year, are provided in **Table 1**. The credits will also reduce local option income taxes owed by individuals subject to the tax to the extent that the retailers are limited liability companies (LLC) or other business forms where the profits are taxed through the owner's individual income tax return. The impact on local option income tax for schools cannot be determined, but will be minimal in FY 2007 and FY 2008.

	Current Ethanol Credit	New Ethanol Credit	E85 Credit	Biodiesel Credit	Net Income Tax Credit Change
FY 2007	\$6.80	-\$6.30	-\$0.20	-\$0.54	-\$0.24
FY 2008	8.80	-6.70	-1.70	-1.45	-1.05
FY 2009	9.90	-7.30	-4.00	-3.08	-4.48
FY 2010	10.50	-7.90	-6.10	-3.79	-7.29
FY 2011	11.10	-8.60	-4.30	-4.55	-6.35
FY 2012	11.60	-8.70	-6.10	-5.15	-8.35
FY 2013	12.20	-8.90	-7.30	-5.79	-9.79
FY 2014	12.80	-9.00	-8.10	0.00	-4.30
FY 2015	13.10	-9.20	-8.40	0.00	-4.50
FY 2016	13.40	-9.10	-8.10	0.00	-3.80
FY 2017	14.10	-9.00	-7.30	0.00	-2.20
FY 2018	14.70	-9.30	-6.30	0.00	-0.90
FY 2019	14.90	-9.30	-4.70	0.00	0.90
FY 2020	15.10	-9.30	-2.70	0.00	3.10
FY 2021	15.20	-9.60	0.00	0.00	5.60
FY 2022	15.40	-9.80	0.00	0.00	5.60
FY 2023	15.50	-10.00	0.00	0.00	5.50
FY 2024	15.60	-10.30	0.00	0.00	5.30
FY 2025	15.70	-10.20	0.00	0.00	5.50
FY 2026	15.80	-10.10	0.00	0.00	5.70
Total	\$262.2	-\$178.6	-\$75.3	-\$24.3	-\$16.0

The Bill will also have other impacts on State finances, and those impacts are provided in **Table 2**. The largest impact relates to an increase in Road Use Tax Fund revenue due to increased gas tax resulting from increased gasoline gallons sold.

<p align="center">Table 2 Other Impacts on State Finances Dollars in Millions HF 2759 - Renewable</p>			
	Gas Tax to Road Fund	Fuels Infrast. Approp.	Administrative Expenses
FY 2007	\$0.00	-\$2.00	-\$0.95
FY 2008	-0.10	-2.00	-0.50
FY 2009	0.50	-2.00	-0.40
FY 2010	0.60	0.00	-0.30
FY 2011	0.70	0.00	-0.30
FY 2012	1.50	0.00	-0.30
FY 2013	2.00	0.00	-0.30
FY 2014	2.50	0.00	-0.30
FY 2015	3.20	0.00	-0.30
FY 2016	3.60	0.00	-0.30
FY 2017	4.00	0.00	-0.30
FY 2018	4.60	0.00	-0.30
FY 2019	5.20	0.00	-0.30
FY 2020	5.90	0.00	-0.30
FY 2021	6.80	0.00	-0.30
FY 2022	7.60	0.00	-0.30
FY 2023	8.40	0.00	-0.30
FY 2024	9.30	0.00	-0.30
FY 2025	9.90	0.00	-0.30
FY 2026	10.50	0.00	-0.30
Total	\$86.70	-\$6.00	-\$6.95

The fiscal impact for the two ethanol sales tax credits is based on the assumption that the tax credits and infrastructure assistance will be sufficient to induce retailers to convert or install E85 tanks, and that consumers will purchase E85 in quantities sufficient to meet the percentage goals in calendar years 2010, 2015, 2020, and 2025.

Assuming passage of the Bill, the combination of federal and State ethanol tax subsidies will be approximately \$0.70 per gallon for E85¹. If the price of pure ethanol and the price of gasoline are similar, this level of subsidy will be more than sufficient to overcome the mileage disadvantage of E85. However, the futures price of ethanol and gasoline are currently not similar, with the April price of Ethanol currently \$0.65 above that of gasoline, with the differential not within \$0.35 per gallon until at least October.² This situation will hamper the development of an E85 retailer and consumer base until the price of ethanol falls or the price of gasoline rises (or a combination of the two).

If the price of pure ethanol is not low enough relative to pure gasoline, if the number of stations installing the necessary infrastructure is low, if the number of vehicles on Iowa roads is not sufficient, or if the consumer does not see an advantage in using E85 in their vehicle, the percentage thresholds will not be achieved. If that happens, the tax credits will not be utilized to the degree projected. In addition, the gas tax increases dictated in the Bill will generate additional revenue for the Road Use Tax Fund.

¹ This tax subsidy level assumes an average annual E85 ethanol content of 79.0%. The federal credit would equal \$0.41, the State E85 credit \$0.25, and the State ethanol credit \$0.04 per gallon.

² The ethanol futures price is from the Chicago Board of Trade. The gasoline futures price is from the New York Mercantile Exchange. Prices quoted March 24, 2006.

Appendix A

HF 2754 - Renewable Fuels - Ethanol Volume Assumptions Without Bill

In Millions of Gallons

Calendar Year	Unblended	Ethanol E10	Ethanol E85	Aviation	Total	Replacement Percentage
CY 2005	413.6	1,211.8	0.2	2.6	1,628.2	7.4%
CY 2006	391.4	1,249.7	0.7	2.6	1,644.4	7.6%
CY 2007	377.7	1,278.8	1.7	2.6	1,660.8	7.8%
CY 2008	358.0	1,308.3	8.4	2.7	1,677.4	8.2%
CY 2009	336.1	1,338.3	16.9	2.7	1,694.0	8.7%
CY 2010	313.8	1,368.8	25.7	2.7	1,711.0	9.2%
CY 2011	295.4	1,399.8	30.2	2.7	1,728.1	9.5%
CY 2012	272.1	1,431.3	39.3	2.8	1,745.5	10.0%
CY 2013	248.4	1,463.2	48.5	2.8	1,762.9	10.5%
CY 2014	242.0	1,477.8	57.9	2.8	1,780.5	10.9%
CY 2015	235.4	1,492.6	67.4	2.8	1,798.2	11.3%
CY 2016	210.5	1,525.7	77.2	2.9	1,816.3	11.8%
CY 2017	185.1	1,559.3	87.1	2.9	1,834.4	12.3%
CY 2018	187.0	1,565.6	97.3	2.9	1,852.8	12.6%
CY 2019	188.8	1,571.9	107.6	3.0	1,871.3	12.9%
CY 2020	190.7	1,578.2	118.1	3.0	1,890.0	13.3%
CY 2021	192.6	1,584.4	128.9	3.0	1,908.9	13.6%
CY 2022	184.9	1,600.3	139.8	3.1	1,928.1	14.0%
CY 2023	186.8	1,606.5	150.9	3.1	1,947.3	14.4%
CY 2024	188.6	1,612.8	162.3	3.1	1,966.8	14.7%
CY 2025	190.5	1,619.0	173.8	3.1	1,986.4	15.1%

HF 2754 - Renewable Fuels - Ethanol Volume Assumptions With Bill

In Millions of Gallons

Calendar Year	Unblended	Ethanol E10	Ethanol E85	Aviation	Total	Replacement Percentage
CY 2005	413.6	1,211.8	0.0	2.6	1,628.0	7.4%
CY 2006	391.0	1,249.7	1.0	2.6	1,644.3	7.6%
CY 2007	367.3	1,285.3	6.6	2.6	1,661.9	8.1%
CY 2008	349.4	1,307.4	20.2	2.7	1,679.6	8.7%
CY 2009	319.7	1,343.9	30.5	2.7	1,696.9	9.3%
CY 2010	297.3	1,371.0	43.5	2.7	1,714.6	10.0%
CY 2011	279.2	1,385.5	67.7	2.7	1,735.1	11.1%
CY 2012	256.1	1,404.8	91.3	2.8	1,754.9	12.1%
CY 2013	232.4	1,424.4	115.4	2.8	1,775.0	13.2%
CY 2014	208.1	1,444.6	140.1	2.8	1,795.7	14.2%
CY 2015	201.4	1,450.1	161.2	2.9	1,815.4	15.0%
CY 2016	176.0	1,474.6	181.7	2.9	1,835.3	15.9%
CY 2017	150.2	1,493.6	209.8	2.9	1,856.5	17.0%
CY 2018	151.9	1,486.2	236.6	3.0	1,877.7	17.9%
CY 2019	153.7	1,476.8	265.9	3.0	1,899.5	18.8%
CY 2020	155.6	1,462.0	301.8	3.0	1,922.5	20.0%
CY 2021	118.5	1,493.0	330.7	3.1	1,945.3	21.1%
CY 2022	110.1	1,490.9	364.1	3.1	1,968.1	22.2%
CY 2023	111.4	1,476.8	400.3	3.2	1,991.6	23.3%
CY 2024	112.6	1,469.2	429.0	3.2	2,014.0	24.1%
CY 2025	113.9	1,461.2	458.2	3.2	2,036.5	25.0%

Appendix B

HF 2754 - Renewable Fuels - Biodiesel Calculations

	Total Statewide Retail Diesel Gallons (Millions)	Statewide Biodiesel % of Total Retail Sales	Blended Biodiesel Gallons (Millions)	% Of Statewide Gallons Sold at 50%+ Locations	Gallons Qualified for Income Tax Credit (Millions)
CY 2005	765.1	7.0%	53.6	n/a	n/a
CY 2006	793.8	9.0%	71.4	25.0%	17.9
CY 2007	823.6	13.0%	107.1	45.0%	48.2
CY 2008	854.4	16.0%	136.7	75.0%	102.5
CY 2009	886.5	19.0%	168.4	75.0%	126.3
CY 2010	919.7	22.0%	202.3	75.0%	151.8
CY 2011	954.2	24.0%	229.0	75.0%	171.8
CY 2012	990.0	26.0%	257.4	75.0%	193.0

Sources

Department of Revenue (taxable fuel sales volume)
Chicago Board of Trade (ethanol futures prices)
New York Mercantile Exchange (gasoline futures prices)

/s/ Holly M. Lyons

March 27, 2006

The fiscal note and correctional impact statement for this bill was prepared pursuant to Joint Rule 17 and pursuant to Section 2.56, Code of Iowa. Data used in developing this fiscal note and correctional impact statement are available from the Fiscal Services Division, Legislative Services Agency to members of the Legislature upon request.
